



#### **VOLUME 56 ISSUE 08**

### September 2006

### IN OTHER WORDS...

One of the biggest complaints I have heard about getting involved in amateur radio is the cost. Multiband rigs that operate CW, RTTY and SSB and connect up to computers for packet and SSTV and antenna towers bristling with antennas of all shapes and sizes built to stand the test of time and nature require a major investment, not to mention a stable place to grow all those towers and house the test equipment and radios. It is daunting, to say the least, but that kind of ham shack isn't the only way to go and can be quite creative. Low power QRP rigs you build yourself or have someone build for you and fit in a pocket, briefcase or backpack, along with a suitable length of antenna wire, give the fancy rigs a run for the money.

I belong to an online group that discusses the ATS-3 (AT Sprint) designed and sold as a kit by Steve KD1JV Weber. The ATS-3 and its siblings are a marvel of miniaturization that offers those of us without the money for the big rigs a chance to get on the air with very little cost. What fascinates me isn't just the engineering and design but the innovative ways hams have found to enclose the works.

Michael Harnage W1MT chose the ATS-3 for the Spartan Sprints and sarted out using the easily available Altoids tins to house the works. Mike has "6 or 7 ATS rigs...and currently [has] two..." that he has kept. He "...tried many different closures and always came back to the Altoids tin [for] robustness and balsa..." because it is lighweight. His [Spartan Sprint rig lives in a balsa enclosure that includes a monokote type

covering...purely for the weight reduction that it brings.



W1MT balsa enclosure/accessories

One of Michael's ATS-3s "...lives in an Altoids tin painted olive green. The rigs are designed to be inserted into the box such that when operating the Altoids [tin] is upside down.



W1MT ATS-3 in green Altoids tin

Gil Stacy NN4CW "...tried Altoids tins and a sardine tine. The sardine tin was much lighter." He decided he "...could go lighter if the dimensions of the enclosure were smaller." Since Gil is a fisherman who uses graphite fly rods he decided to go another way. "Graphite (carbon fiber) is very strong for its weight [and is] used in aerospace applications." Because of a discussion on QRL.com about graphite's potential, Gil decided to see how it would work. "...no one had tried one that I am aware of [and] I haven't seen any other radios made from it, although I am sure there are some by now."



NN4CW's silk tie graphite enclosure

After hearing about DragonPlate, a carbon fiber laminate, he "...weighed equal sizes of graphite veneer and 0.125" thick balsa on my reloading balance beam scale[, finding] DragonPlate was 15% lighter." With the design cut from an old silk necktie and a little epoxy, Gil had a lightweight and fashionable enclosure for his ATS-3. "The bottom panel was also made from the same silk stretched across a thin frame of DragonPlate." Gil plans to keep experimenting to "...further lighten the weight of the radio by using a piece of Tyvek taped to the bottom."

Gil "...noted the top contesters in the ARS Spartan Sprint, skinny division, used the...multiband..." ATS. His rig, the Skinny Minnie, is "...stripped down with one ear bud direct wired and JST connectors on the battery and antenna. [His] key is now one of the ATS

buttons [and] is strictly for the SS contest. Gil runs at 5 watts with a li-poly battery "...weighing almost nothing." Steve Weber KD1JV scrounged most of the surface mount design parts from an old satellite receiver board, something Gil calls "...the old ham spirit." His graphite and silk necktie enclosure is in the same tradition.

Harald Gosch OE6GC chose a "...cheap plastic enclosure for electronic equipment [with] a small door for a 9V battery..." that he uses to change band modules. He decided "...not to try the tin (cult)..." enclosure and opted for an enclosure that offered a "...very easy [material in which] to make the holes and [that] encloses all the necessary equipment.



OE6GC paddle and black enclosure

Harald also sometimes enters QRP contests and chose the ATS-3 because it is a highly "...sophisticated rig which gives top performance [and because] it's so small [you can] take the whole radio [in] the pockets of your...street jacket."

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#### NONPROFIT STATUS

The PPRAA is a federal 501(c)(3) nonprofit organization, and welcomes all contributions. Your contributions or donations may be tax-deductible.

# The Future of Amateur Radio Jamboree-On-The-Air

What is the best way to influence our youth to participate and become an Amateur Radio Operator?

- a. Watch Saturday afternoon college football
- b. Sit in your ham shack making QSOs
- c. Work with youth at Jamboree-On-The-Air

What is the best way to influence adults to participate and become an Amateur Radio Operator?

- a. Go skateboarding with friends
- b. Sit in your ham shack making QSOs
- c. Work with youth at Jamboree-On-The-Air

OF COURSE, the answer to both of these questions is C. By working with the youth you are influencing their future and the future of amateur radio. You're also influencing adult leaders. This is a great opportunity to put on a great demonstration for scouts and adults.

The 49th Jamboree-On-The-Air, Oct. 21, is only 7 weeks away. We will be operating from Peaceful Valley Scout Ranch near Elbert Colorado.

We do not have any station coordinators yet. A list of stations that need to be manned follows. The Boy Scouts have 2 GP-Medium tents and we have received permission to use a couple different repeater systems, but we still lack stations and manpower.

The last planning meeting went well.

Next planning meeting: September 12th, 6:30 PM Planning meeting location: EMC Corp. 6005 North Delmonico Road Suite 250 (This is about 3/4 mile North of Pro Rodeo Hall of Fame)

We already have:

- 2 GP-Medium tents
- Repeater access
- EOSS balloon launch with an amateur radio only payload

Volunteer coordinators needed for:

- **♣** 2 HF stations
- ♣ 2 or 3 VHF stations
- ♣ Digital (psk-31, RTTY, WINLink, etc.)
- Satellite (if enough birds justify setting up the station)

These demonstration modes would be great:

- CW and CW contests that could be conducted at JOTA?
- ♣ SkyWarn Noon Weather Net check-in and report
- 4 APRS this will also be demonstrated with EOSS
- **♣** ATV

Marshall KCØUSF -Display board will include:

- **HF** Propagation
- Computer-to-Radio Interface
- **↓** IRLP/EchoLink (overview)
- **4** Amateur Satellite communications

#### ARES/RACES overview:

From the scouts perspective ARES/RACES could be discussed in general terms, almost as a single entity. We need help facilitating a program dealing with these organizations, including SkyWarn?

Because the scouts are very familiar with the Internet, we thought the Radio-to-Internet tie-in would spark an interest and show the versatility of amateur radio. Besides the station coordinators, we are looking for operators who are comfortable using IRLP and/or EchoLink and can act as mentors for those who are not familiar with these systems.

Nothing works without help. We need you to make JOTA a memorable event. This is the future of amateur radio.

Thanks and 73.

Dan KBØPPM



September's meeting will be held on 9/21/06, at 101 W. Cucharras St. 7PM local time. All members and visitors are welcome. Call in on 146.58 to get in.

Doc WØMCT

# **Amateur Radio Awareness Day September 16, 2006**

September is US Department of Homeland Security (DHS) National Preparedness Month, and Saturday, September 16, is Amateur Radio Awareness Day. For the third straight year, the ARRL and Amateur Radio Emergency Service (ARES) groups across the US will join a coalition of more than 200 national, regional, state and local organizations taking part in preparedness Month activities. ARES is a partner with DHS through the Citizen Corps program. ARRL Media and Public Relations Manager Allen Pitts, W1AGP, says local ARES groups and clubs will be making presentations to civic organizations, at schools and at regional fairs to showcase Amateur Radio.

"More than 4000 ARRL 'Hello' campaign http://www.hello-radio.org/ brochures have gone out in the past few weeks alone to prepare for the monthlong initiative," he said.

To highlight Amateur Radio Awareness Day, ARRL public information officers (PIOs) will promote the DHS's "30 Tips for Emergency Preparedness" (www.dhs.gov/dhspublic/interapp/editorial/editorial\_0 711.xml ) to attract news media coverage. Some tips on promoting National Preparedness Month are on the ARRL public relations Web pages (www.arrl.org/pio/contact/2006/08/SEPTEMBER).

ARRL Public Service Team Manager Steve Ewald, WV1X, notes that the underlying theme of National Preparedness Month is to encourage everyone to be aware of and prepare for emergencies all year long.

"Amateur Radio operators, led by ARRL Field Organization leaders across the country, are encouraged to consider this year's ARRL Simulated Emergency Test (SET) -- as well as all preparations and post-SET evaluations -- as a demonstration of your participation in National Preparedness Month," Ewald said. The target weekend for the 2006 SET is October 7-8

(www.arrl.org/FandES/field/setguide.html).

A major ham radio presentation during September will take place on the West Coast. ARRL Southwestern Division Director Dick Norton, N6AA, says Amateur Radio Expo 2006 (<a href="http://lafair.b2v.org/">http://lafair.b2v.org/</a>) will be held in conjunction with the Los Angeles County Fair. "They will staff the exhibit over four weekends," Norton said, noting that the fair annually attracts hundreds of thousands of visitors.

Amateur Radio Expo 2006 will get under way the weekend of September 9-10 and will feature a special event station plus interactive presentations to demonstrate the many facets of ham radio.

In a related vein, Pitts says he'd like to see a tighter relationship between ARES organizations and the League's corps of volunteer PIOs.

"Too often something happens, and everyone grabs a radio. No one grabs a camera or laptop and gets the word of ARES actions out to the media until long after the story becomes stale," he observed. "We have wonderful stories to tell, but we are too busy to tell them when they are fresh."

Pitts said he and the ARRL Public Relations Committee are working on ways to better integrate public relations and emergency response actions at the local level.

Pitts says that according to the Federal Emergency Management Agency (FEMA), families should plan on being totally on their own for up to four days. "That's like being back in ancient times: no cell phone, no Internet, no 911," he said.

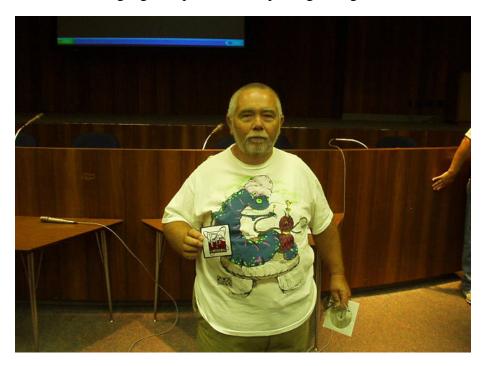
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# And the winner is...

Mike KCØLNO

On August 12<sup>th</sup>, members taunted the fashion police and the wearable skeletons out of the closet at PPRAA's monthly meeting. The reason for this pre-Halloween show was the "Ugly Tee-Shirt" contest. Seven people participated with homemade, amateur radio-related, store bought and just plain ugly fashion disaster t-shirts, everyone shared a few good laughs.

The youngest ham in attendance judged the contest, the honor going to Christopher Taylor NC6T who is a shockingly ancient 32 years old. Reluctantly, the contestants faced the crowd and paraded their questionable fashion choices before the audience. Competition was fierce but it was Mike Skinner KCØLNO who crawled away with the honors. One look at his picture will tell you why. It was all in good fun. Congratulations, Mike for being a good sport and for sporting the ugliest t-shirt.



At the next monthly meeting on September 13th we will feature worst home brew project. Dig up your botched soldering, nightmare surface mounts and dog and kid chew toys. Scrape off the debris and bring out that project you trashed and then saved – for parts, of course. The newest amateur in attendance will be the judge.

Jim ABØUK

#### **Ø-BEAT DEADLINE**

The deadline for the October 2006 Ø-Beat is September 25th. Send all submissions to the editor via e-mail, US Mail, telephone or in person. Please feel free to submit an article, joke or news – we need your fresh content!

# Trailing the Fox

Jim ABØUK

The July foxhunt was held on the 29th beginning at 1:00PM. There were three teams participating.

- 1. Ralph, KIØNK
- 2. Fred ABØZK and Mike KCØLNO
- 3. Mike KØMLA and Susan KCØSYA

Team #1 had competed in only one previous fox hunt while team #2 had never competed. We gave team #2 a tutorial before beginning and loaned team #1 a yagi antenna. Both teams apparently learned well as they finished in good time.



The winner was team #3 with 154 total points, combining time and distance driven. Team #2 was second with 189 combined points. Finishing third

was team #1 with 191 points. The teams did well with the hunt and handling clues along the way. The club's fox hunt trophy "Foxy" was presented to Mike and Susan at the monthly club meeting on August 9th since they had to leave the hunt scene before all teams were in.

Clues were an important part of this hunt. They started with a clue of "Bill Gates" given during the announcement email the week prior to the hunt. The fox's transmission had the CW clue of MS. These were to indicate by initials that the fox was located in Mountain Shadows. Alas, some folks guessed Manitou Springs. In addition to the usual clues about compass directions from street locations, there were clues given during the hunt about potato chips and pita bread. Combined, they were to indicate the fox was at a location with "chipita" in the name. It was actually located at Chipita Elementary School. Also, to add interest, there were two decoys near the fox. Further, the fox's polarization varied from different directions so that signal strength was not a reliable indicator of distance to the fox. However, when used properly, the varying polarization would have been an aid in direction finding.

Everyone participating agreed that it was an interesting hunt. Thank you to those who participated and congratulations to the winners.

Jim ABØUK

#### AMATEUR RADIO LICENSE EXAMINATIONS

The Pikes Peak Radio Amateur Association Volunteer Examiner (VE) team holds testing sessions at 9 AM at the Colorado Technical University, 4435 North Chestnut (just west of I-25 and just south of Garden of the Gods Rd). Exam fee is \$14.00 for 1, 2, 3, or all 4 elements at a session. Checks should be payable to ARRL/VEC. For further details and a list of what to bring, contact Erik Mugele KGØXE or Dennis Major NØABC, or visit the PPRAA web site. Mark your calendars:

Aug. 12 - Oct. 14 - Dec. 9

# Cue Solar Cycle 24

The recent appearance on the sun of two socalled "backward sunspots" may mean solar Cycle 23 is drawing to a close and Cycle 24 now is under way or soon will be, [at] least that's the [way some scientists are thinking].

"We've been waiting for this," said Solar Physicist David Hathaway of the Marshall Space Flight Center in Huntsville, Alabama, [since] the first backward spot showed up. "A backward sunspot is a sign that the next solar cycle is beginning."

The term "backward" refers to the sunspot's magnetic polarity. One such sunspot appeared briefly July 31 and then disappeared, but its significance was that its magnetic polarity was just the opposite of current Cycle 23 spots.

Sunspot 905, another more robust backward spot, appeared in late August – although it subsequently began to dissipate – and some sun gazers are saying Cycle 24 already has begun. ARRL propagation guru Tad Cook, K7RA, this week called it "the second sunspot of the new Solar Cycle 24."

"Eventually there will be more of the new reversed sunspots than old ones from Cycle 23, and that occurrence is one way to mark the beginning of the next sunspot cycle," he said. Radio conditions will not improve any time soon but over a period of several years [over] the course of the 11-year cycle, perhaps peaking around 2010.

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WILL BE AWOL MONTH OF SEPT 06. MIGHT MAKE IT BACK BY 9-20.

Please call before you drive.

### PPRAA CLUB MEETING MINUTES 9 August 2006

President Christopher Taylor NC6T called the meeting to order at 7 PM in the El Paso County Health Department Auditorium, followed by introductions around the room.

Silent Keys: James Van Allen

Minutes: Corrections: Mike's call on page #1 should be WV7T. "Special service station" should be "special service club." Minutes approved as corrected.

**Treasurer's Report**: Jim ABØUK reported that we had a \$10109.10 total balance in our three accounts as of 8/6/2006. Total Megafest 2006 profit was \$2954.75.

#### **Committee Reports**

Reflector – John KCØJFH – we currently have 155 email individuals on our reflector membership list.

**Megafest** – Rick KØSU – This was a successful event. Post-planning meeting was held last Saturday after the ham breakfast.

**Programs** – Mike KØMLA

September – BPL

October – Elections - if interested in running, contact an officer or board member.

November – Personal Emergency Preparedness by Su KCØPRN and Rob N7LV.

Special Event Station – Mike K0MLA received a nice letter from the Pioneer's museum thanking the club for our participation. Our special event QSL card is in the time capsule, which was buried yesterday. We welcome suggestions for other special events.

**Tech Education** – Mike WV7T is trying to raise some money to get a swamp cooler for the training building. He will be having a ham radio equipment yard sale August 19 – contributions for the sale are welcome. Mike is soliciting suggestions to improve attendance at meetings and events. Would like to form an education committee to brainstorm ideas. Could we have some mini-workshops/classes? Please use our suggestion box at our meeting sign-in/entry area. We also need instructors to teach the various tech class sections.

**VE Test Session** – Rick KØSU – this Sat at Colorado Technical University. The exams are held the second Saturday of even months at CTU.

AMSAT - Tom NØNTX - CubeSat launch failed and crashed. Will try again.

Awards - Rick KØSU - checked cards for two individuals' awards.

**CCARC** Dan KBØPPM – no meeting lately.

**RACES -** Doc WØMCT – meeting next Thursday, 7 PM, 101 W. Costilla.

**Unfinished Business** – none

#### **New Business**

Greg – WA2OOD an individual he knows is moving and will be donating a bunch of equipment to our club.

Mike Dosero NØMUD - needs some help to move and to take down his beam antenna on August 19 at his home.

Dick – Two top MARS officials will be in town August 16. They will be discussing plans for setting up MARS emergency communications support.

Mike WV7T – Ham breakfast September 2.

JOTA – Dan KBØPPM – needs volunteers for this special event. Would like to have HF stations, UHF/VHF stations, IRLP station, ILINK, PSK31, CW, APRS, and emergency services. This will be October 21<sup>st</sup> at the Boy Scout Camp in Elbert, CO.

Jim ABØUK – Hamfest, Sunday, Aug 20, Jefferson County Fairgrounds.

Mike KØMLA – Simplex Net Thursdays at 7 PM. Foxhunt Saturday, Aug 26, see Reflector.

Picnic - Su KCØPRN - August 12 Sat at Dirty Woman Park in Monument. Starts at 9 AM, lunch at noon. See www.ppraa.org for details on what food to bring.

The next Board meeting will be held at the picnic August 12.

Cont'd

PPRAA Club Meeting Minutes: Cont'd...

**Program** – Bob Witte KØNR presented details of the upcoming (next Sunday) Colorado 14er Event.

**Contest:** Ugliest and goofiest T-shirt contest. Of the four participants, Mike KCØLNO was the winner with his "Who Are You" weird T-shirt.

**Hammy Award** – Su presented the Hammy to Mike and Rhoda for their service to the club.

Foxy Award – Jim ABØUK presented the Foxy to Mike and Sue for winning the Foxhunt – 3 teams participated at the last Foxhunt. The fox was at Chipita Elementary School in Mountain Shadows. Clues included Bill Gates (MS), pita bread, and potato chips (Chipita).

**Next Club Meeting:** 7 PM, Wednesday, September 13, at the El Paso County Medical Department Auditorium.

**September Board Meeting:** 7 PM, Monday, September 18, at The Remodeler.

#### **Submitted by:**

John Wishart KCØJFH PPRAA Secretary 23 August 2005

### PPRAA BOARD MEETING MINUTES 12 August 2006

**Attendees:** Christopher NC6T, Mike KØMLA, Jim ABØUK, Mike WV7T, John KCØJFH, Su KCØPRN, Rick KØSU.

President Christopher NC6T called the meeting to order at 1:33 PM following the club picnic at Dirty Woman Park in Monument.

The minutes were approved as printed in the Zero Beat.

### Reports

Treasurer's Report - Jim ABØUK reported we are still in good shape financially.

Vice President's Report – Mike KØMLA noted that we have enough nominees to fill the slate for our elections in October.

Mike WV7T volunteered to accept the club asset manager position with the permission of Mike, the current asset manager.

Megafest – Rick KØSU volunteered to be in charge of forums in 2007.

The meeting was adjourned at 1:39 PM

Next PPRAA Board meeting: 7PM, Monday, September 18, 2006, at The Remodeler.

#### **Submitted by:**

John Wishart KCØJFH PPRAA Secretary23 August 2006

#### PPRAA MEETING INFORMATION

The Pikes Peak Radio Amateur Association meets monthly at 7 PM on the 2<sup>nd</sup> Wednesday of each month at the El Paso County Health Department Auditorium, 305 S. Union Blvd, downstairs at the apex of the two buildings. For a map, please visit our web site at http://www.qsl.net/ppraa/ or contact any of the board members for more information.

#### PPRAA PRESIDENT'S CORNER

The annual PPRAA summer picnic occurred during another wonderful Colorado day of mixed sun and spotty rain a few weeks ago and a great time was enjoyed by all those who came out for the event. Once again Su KCØPRN organized and put on a fantastic event for the club. Thanks to Su and her husband, Art, for such a fun time. Everyone who attended brought some tasty food for all to enjoy and our tropical paradise in Monument was even ambushed by some cheerful pirates. If you missed out, plan on making time for the 2007 summer picnic – you'll have a great time.

Nominations are open for club board members and officers for the next two-year term. Serving on the club board is a great opportunity to become more involved in the activities and guidance of the club. You represent your fellow club members and help to make decisions that affect the whole organization. You'll gain insight into club operations and have a voice in future planning. I encourage each one of you to consider running for a position on the board. If you're interested, get in touch with club vice president Mike KØMLA. If you're still not sure about running, talk to any of the current board members at the next club meeting and I'm sure they'll be able to answer your questions. I'll be looking for you on the ballot.

While we just wrapped up Megafest 2006 in July, soon it will be time to start the planning and early preparations for Megafest 2007. For 2007, the club is looking for a member to chair the Megafest planning committee. Now is your chance to volunteer for a dynamic, exciting and challenging position. Don't worry if you haven't done something like this before, there are plenty of other club members with experience in all aspects of planning, organizing and running the Megafest to provide you with support. The planning committee chair is responsible for ensuring that each of the committee members carries out their role and seeing that all the elements come together to become the Megafest. Typically, planning meetings are held once a month with coordination between meetings occurring mostly by email messages and phone calls. Please get in touch with me or another club board member if you are interested in volunteering for the chairing Megafest or sitting on the committee. We'd appreciate it.

Just as the various amateur radio events are winding down for the summer around the Front Range, word is out that solar cycle #24 has begun. Solar watchers have reported seeing the tell-tale sign of a solar cycle minimum, sending the signal that cycle #23 has reached its end. Most if the predictions for cycle 24 I have read put it at or near record levels, which bodes well for some exciting signal propagation in the coming years. I know it will be fun to see how far I can reach with my humble 100-watt station during cycle 24. I look forward to working each of you via the long path soon.

73,

Christopher NC6T

### In Other Words... Cont'd

For sheer and clear appeal, Mike Schettler WA6MER, chose plastic sheet to enclose his ATS-3 "...because I like the way the surface mount construction looks." Mike's wife says "...it is like jewelry." He chose not to squeeze his rig into an Altoids tin. With a neighbor's help in cutting the plastic sheet, a little sandpaper to smooth the edges and car rubbing compound to make the edges look clear, Mike's rig is indeed a portable jewel box for the well equipped ham.

Each enclosure shows versatility and the creative possibilities of amateur radio. What will your next project be?



WA6MER's clear plastic enclosure

73. Jackie Cornwell ACØCA

# **MEMBERSHIP APPLICATION**

All memberships are up for renewal at the end of the year. If you haven't renewed your membership yet, please use the form at the bottom of this page, and fill out all of the appropriate information so that the Membership Committee can update the records. Include your family so they can share the value and the fun. If you know someone interested in joining, make a copy for them or have them visit PPRAA on the web and download a copy of the PDF file at www.qsl.net/ppraa/membership.html.

Membership Application for the Pikes Peak Radio Amateur Association, Inc. P.O. Box 16521, Colorado Springs, CO 80935-6521					
Date:	☐ New Member	l New Member ☐ Renewal In which activities would you like to participate?			
Name:	Zip:		Field Day Demonstrations Nets or round tables Organize activities Teach ham classes	라 라 라 라 라 라	
Call: Class: N T + G A Mbr of ARRL? $\square$ Yes $\square$ No E-mail:			Full Member Family Membership Over 65	\$15: ⇒□ \$18: ⇒□ \$10: ⇒□	
Additional Family Members to Join/Renew:			Over 65 Family Associate	\$12: □□ □	
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